

### **Abstract of the Disclosure**

The present invention relates to methods and compositions for the prevention and treatment and prevention of immune system disorders, including cancer, AIDS, asthmatic disorders, autoimmune diseases, organ transplant rejection and chronic viral diseases such as HCV or HBV infections. The therapeutic methods of the invention comprise administering molecules that modulate the activity of 8F4, thereby modulating costimulation of T cells. The present invention further provides monoclonal antibodies against the 8F4 molecule and hybridoma cells which produce said monoclonal antibodies. Pharmaceutical compositions comprising molecules that modulate the activity of 8F4 are also provided.